CLAIMS:

What is claimed is:

1   1.   A method of indicating a status affected by the performance of an ALU

2   mathematical operation, comprising:

3   executing an ALU mathematical operation instruction on a set of source operands;

4   determining that the ALU mathematical operation instruction corresponds to an ALU

5   mathematical operation instruction with carry;

6   producing a result based on the set of source operands in accordance with the ALU

7   mathematical operation instruction; and

8   setting a status flag based on the result.

1   2.   The method according to claim 1, wherein the step of setting the status flag

2   includes the step of determining that the result is a non-zero value.

1   3.   The method according to claim 2, wherein the step of setting the status flag

2   includes the step of clearing the status flag by writing a value of zero to the status flag.

1   4.   The method according to claim 3, wherein the step of setting the status flag

2   includes the step maintaining the value of zero in the status flag until an ALU

3   mathematical operation instruction without carry is determined.

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1   5.   The method according to claim 1, wherein the step of setting the status flag

2   includes the step of determining that the result is a zero value.

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1   6.   The method according to claim 5, wherein the step of setting the status flag

2   includes the step of maintaining the value in the status flag.

1   7.   A processor for indicating a status affected by the performance of an ALU

2   mathematical operation, comprising:

3   an ALU operable to:

4   execute an ALU mathematical operation instruction on a set of source operands;

5   determine that the ALU mathematical operation instruction corresponds to an ALU

6   mathematical operation instruction with carry;

7   produce a result based on the set of source operands in accordance with the ALU

8   mathematical operation instruction; and

9   set a status flag based on the result.

1   8.   The processor according to claim 7, further comprising the ALU operable to

2   determine that the result is a non-zero value.

9.   The processor according to claim 8, further comprising the ALU operable to clear

1   the status flag by writing a value of zero to the status flag.

3   10.   The processor according to claim 9, further comprising the ALU operable to

4   maintain the value of zero in the status flag until an ALU mathematical operation

5   instruction without carry is determined.

1   11.   The processor according to claim 7, further comprising the ALU operable to

2   determine that the result is a zero value.

1   12.   The processor according to claim 11, further comprising the ALU operable to

2   maintain the value of the status flag.